What is claimed is:

1. A method of drilling a well bore in a subterranean formation comprising the steps of:

providing a drilling fluid comprising

an aqueous-based fluid, and

a shale inhibiting component comprising a nanoparticle source; and

placing the drilling fluid in the well bore in the subterranean formation.

2. The method of claim 1 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

3. The method of claim 2 wherein the polyvinyl pyrrolidone comprises crosslinked polyvinyl pyrrolidone.

4. The method of claim 1 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

5. The method of claim 4 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

6. The method of claim 1 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

7. The method of claim 1 wherein the shale inhibiting component is present in the drilling fluid in a concentration sufficient to inhibit the degradation of shale.

8. The method of claim 1 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% by volume to about 5% by volume of the drilling fluid.

9. The method of claim 1 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

10. The method of claim 1 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

11. The method of claim 1 wherein the drilling fluid further comprises a salt.

12. The method of claim 11 wherein the salt is present in the drilling fluid an amount in the range of from about 5 pounds per barrel to about the salt saturation limit of the drilling fluid.

13. The method of claim 11 wherein the salt comprises potassium chloride, calcium chloride, sodium chloride, potassium formate, calcium chloride, calcium bromide, potassium carbonate, or a mixture thereof.

14. The method of claim 1 wherein the drilling fluid further comprises antifoams, biocides, bridging agents, corrosion control agents, dispersants, flocculants, fluid loss additives, foamers, H_2S scavengers, lubricants, oxygen scavengers, scale inhibitors, viscosifiers, or weighting agents.

15. The method of claim 1 wherein the density of the drilling fluid is within the range of from about 7 pounds per gallon to about 22 pounds per gallon.

16. The method of claim 1 wherein the aqueous-based fluid is fresh water.

17. The method of claim 1 wherein the shale inhibiting component inhibits the degradation of shale by acting as a flocculant.

18. The method of claim 1 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% to about 5% by volume of the drilling fluid; wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles; and wherein the drilling fluid further comprises potassium chloride in an amount in the range of from about 5 pounds per barrel to about the salt saturation limit of the drilling fluid.

19. A method of drilling a well bore in a subterranean formation comprising shale comprising the steps of:

providing a drilling fluid comprising an aqueous-based fluid, and a shale inhibiting component comprising a nanoparticle source; and

drilling the well bore in the subterranean formation using the drilling fluid.

20. The method of claim 19 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

21. The method of claim 19 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

22. The method of claim 21 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

23. The method of claim 19 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

24. The method of claim 19 wherein the shale inhibiting component is present in the drilling fluid in a concentration sufficient to inhibit the degradation of shale.

25. The method of claim 19 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% by volume to about 5% by volume of the drilling fluid.

26. The method of claim 19 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

27. The method of claim 19 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

28. The method of claim 19 wherein the shale inhibiting component inhibits the degradation of shale by acting as a flocculant.

29. The method of claim 19 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% to about 5% by volume of the drilling fluid; and wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

30. A method of enhancing the shale inhibition of an aqueous-based drilling fluid comprising the step of adding to the drilling fluid a shale inhibiting component comprising a nanoparticle source.

31. The method of claim 30 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

32. The method of claim 31 wherein the polyvinyl pyrrolidone comprises crosslinked polyvinyl pyrrolidone.

33. The method of claim 30 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

34. The method of claim 33 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

35. The method of claim 30 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

36. The method of claim 30 wherein the shale inhibiting component is added to the drilling fluid in an amount sufficient to inhibit the degradation of shale.

37. The method of claim 30 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% by volume to about 5% by volume of the drilling fluid.

38. The method of claim 30 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

39. The method of claim 30 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

40. The method of claim 30 wherein the shale inhibiting component inhibits the degradation of shale by acting as a flocculant.

41. A method of drilling a well bore in a subterranean formation comprising the step of using a drilling fluid that comprises a nanoparticle source.

42. The method of claim 41 wherein the nanoparticle source inhibits the degradation of shale.

43. The method of claim 41 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

44. The method of claim 41 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

45. A method of flocculation comprising the steps of:

providing a fluid comprising suspended particles, and

adding a shale inhibiting component comprising a nanoparticle source to the fluid comprising suspended particles to form flocculated particles.

46. The method of claim 45 wherein the fluid is wastewater.

47. The method of claim 45 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

48. The method of claim 47 wherein the polyvinyl pyrrolidone comprises crosslinked polyvinyl pyrrolidone.

49. The method of claim 45 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

50. The method of claim 49 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

51. The method of claim 45 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

52. The method of claim 45 wherein the shale inhibiting component is added to the fluid in an amount sufficient to flocculate the suspended particles.

53. The method of claim 45 wherein the shale inhibiting component is added to the fluid comprising nanoparticles in an amount so that the nanoparticle source is present in the fluid in an amount in the range of from about 0.0025% to about 5% by volume of the fluid.

54. The method of claim 45 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

55. The method of claim 45 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

56. A drilling fluid comprising an aqueous-based fluid and a shale inhibiting component comprising a nanoparticle source.

57. The drilling fluid of claim 56 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

58. The drilling fluid of claim 57 wherein the polyvinyl pyrrolidone comprises crosslinked polyvinyl pyrrolidone.

59. The drilling fluid of claim 56 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

60. The drilling fluid of claim 59 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

61. The drilling fluid of claim 56 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

62. The drilling fluid of claim 56 wherein the shale inhibiting component is present in the drilling fluid in a concentration sufficient to inhibit the degradation of shale.

63. The drilling fluid of claim 56 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% to about 5% by volume of the drilling fluid.

64. The drilling fluid of claim 56 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

65. The drilling fluid of claim 56 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

66. The drilling fluid of claim 56 further comprising a salt.

67. The drilling fluid of claim 66 wherein the salt is present in an amount in the range of from about 5 pounds per barrel to about the salt saturation limit of the drilling fluid.

68. The drilling fluid of claim 66 wherein the salt comprises potassium chloride, calcium chloride, sodium chloride, calcium bromide, potassium formate, potassium carbonate, or a mixture thereof.

69. The drilling fluid of claim 56 further comprising antifoams, biocides, bridging agents, corrosion control agents, dispersants, flocculants, fluid loss additives, foamers, H_2S scavengers, lubricants, oxygen scavengers, scale inhibitors, viscosifiers, or weighting agents.

70. The drilling fluid of claim 56 wherein the density of the drilling fluid is within the range of from about 7 pounds per gallon to about 22 pounds per gallon.

71. The drilling fluid of claim 56 wherein the aqueous-based fluid is fresh water.

72. The drilling fluid of claim 56 wherein the shale inhibiting component inhibits the degradation of shale by acting as a flocculant.

73. The drilling fluid of claim 56 wherein the nanoparticle source is present in the drilling fluid in an amount in the range of from about 0.0025% to about 5% by volume of the drilling fluid; wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles; and wherein the drilling fluid further comprises potassium chloride in an amount in the range of from about 5 pounds per barrel to about the salt saturation limit of the drilling fluid.

74. A composition that inhibits the degradation of shale, the composition comprising a shale inhibiting component comprising a nanoparticle source.

75. The composition of claim 74 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

76. The composition of claim 75 wherein the polyvinyl pyrrolidone comprises crosslinked polyvinyl pyrrolidone.

77. The composition of claim 74 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.

78. The composition of claim 77 wherein the rubber latex comprises emulsion-polymerized copolymers of 1,3-butadiene and styrene.

79. The composition of claim 74 wherein the nanoparticle source comprises crosslinked polyvinyl pyrrolidone and emulsion-polymerized copolymers of 1,3-butadiene and styrene.

80. The composition of claim 74 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 1,000 nanometers.

81. The composition of claim 74 wherein at least a portion of the nanoparticle source comprises nanoparticles having an average particle size of less than about 400 nanometers.

82. A drilling fluid for use in subterranean applications comprising a nanoparticle source.

83. The drilling fluid of claim 82 wherein the nanoparticle source inhibits the degradation of shale.

84. The drilling fluid of claim 82 wherein the nanoparticle source comprises polyvinyl pyrrolidone, at least a portion of the polyvinyl pyrrolidone is in the form of nanoparticles.

85. The drilling fluid of claim 82 wherein the nanoparticle source comprises rubber latex, at least a portion of the rubber latex is in the form of nanoparticles.